determining whether or not said received signal is currently accompanied by said substantially constant direct current (DC) offset component;

calculating desired spectral response for said equalizer using at least a portion of said field synchronizing signal as a training signal, in response to it being determined that the direct current (DC) level said received signal is currently accompanied by said substantially constant direct current (DC) offset component;

establishing desired spectral response for said equalizer other than from calculations using at least a portion of said field synchronizing signal as a training signal, in response to it being determined that said received signal is currently unaccompanied by said substantially constant direct current (DC) offset component.

25. The method of claim 24 wherein said step of establishing desired spectral response for said equalizer other than from calculations using at least a portion of said field synchronizing signal as a training signal consists of establishing a flat amplitude-versus-frequency characteristic in response to it being determined that said received signal is currently unaccompanied by said substantially constant direct current (DC) offset component.

26. A method of controlling the operating mode of an equalizer comprising:

determining the variation, during an interval of time, of the direct current (DC) level of a received signal; and

controlling the operating mode of the equalizer in response to the determined variation.

27. The method of claim 26 wherein the received signal comprises multi-level symbols representing data and a field synchronizing signal, said symbols being characterized by a DC offset and wherein the determining step further comprises;

processing the field synchronizing signal to determine the variation of the DC offset in the received signal.

28. The method of claim 27 wherein the field synchronizing signal comprises a pseudo random number symbol sequence and wherein the processing comprises sampling a part of the pseudo random number symbol sequence.

29. The method of claim 28 wherein the sampled symbol sequence is surrounded by a plurality of non-variant symbols.

30. A digital television receiver comprising:

a detector for determining the direct current (DC) level of a received digital television signal; and

an adaptive equalizer having different operating modes for responding to said received digital television signal, the operating mode of said adaptive equalizer being selected responsive to the direct current (DC) level of said received digital television signal.

31. The receiver of claim 30 further characterized by being of a type in which, responsive to the amplitude of a direct component of said received signal being more than a prescribed threshold value, said adaptive equalizer is conditioned to have its amplitude-versus-frequency characteristic determined responsive to calculations using at least a portion of said field synchronizing signal as a training signal.

32. The receiver of claim 31 further characterized by being of a type in which, responsive to the amplitude of said direct component of said received signal being less than a prescribed threshold level, desired spectral response for said adaptive equalizer is established other than from calculations using a training signal.

33. The receiver of claim 31 further characterized by being of a type in which, responsive to the amplitude of said direct component of said received signal being less than a prescribed threshold level, said adaptive equalizer is conditioned to have a flat amplitude-versus-frequency characteristic.

34. A receiver including an adaptive equalizer having different operating modes comprising:

means for determining the variation of the direct current (DC) level of a received signal during an interval of time; and

means for controlling the operating mode of said adaptive equalizer as a function of the determined DC variation.

35. The receiver of claim 34 wherein said received signal includes a field sync signal and wherein said DC variation determining means operates on said field sync signal.

36. The receiver of claim 35 wherein said field sync signal comprises a pseudo random number sequence of symbols, and further including:

means for sampling a portion of said sequence of symbols for processing by said DC variation means.

37. A receiver for signals that comprise multi-level symbols representing data and a field synchronizing signal, said symbols being characterized by being accompanied by a substantially constant DC component, and for signals that comprise multi-level symbols representing data and being characterized by not being accompanied by said substantially constant DC component, said receiver comprising:

a detector for determining the DC component of a received signal;

an adaptive equalizer having different operating modes for responding to said multi-level symbols, said adaptive equalizer arranged for having its current operating mode selected responsive to the level of the direct component of said received signal as detected by said detector.

38. The receiver of claim 37 further characterized by being of a type in which, responsive to the direct component of said received signal being at least a prescribed threshold level, said adaptive equalizer is conditioned to have its amplitude-versus-frequency characteristic determined responsive to calculations using at least a portion of said field synchronizing signal as a training signal.

39. The receiver of claim 38 further characterized by being of a type in which, responsive to the direct component of said received signal being below a prescribed threshold level, desired spectral response for said adaptive equalizer is established other than from calculations using a training signal.

40. The receiver of claim 38 further characterized by being of a type in which, responsive to the direct component of said received signal being below a prescribed threshold level, said adaptive equalizer is conditioned to have a flat amplitude-versus-frequency characteristic.